devinci

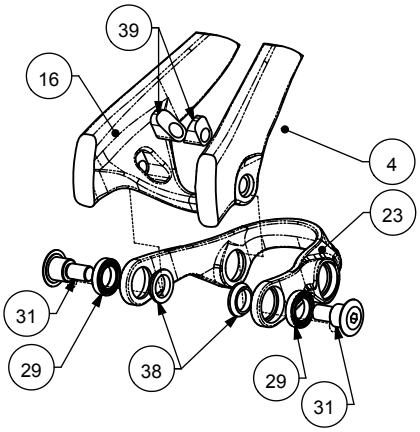
TECHNICAL MANUALS

SPARTAN

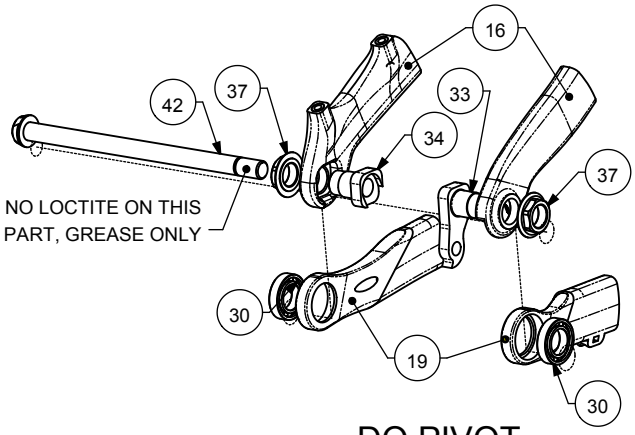
9616

ITEM	DESCRIPTION	PART No.	QTY.
1	FRONT	9615-0300	1
2	SEAT STAYS	9715-9900	1
3	CHAIN STAYS	9616-9800	1
4	LINKAGE	MFL15006	1
5	SHOCK ADJUSTER	MFP15023-XX	2
6	SHOCK BOLT 66mm	MFV00073	1
7	SHOCK BOLT 38.5mm	MFV15001	1
8	BALL BEARING 6802	MFP15024	4
9	BALL BEARING 6903 2RS FULL PACK	MFP11022	4
10	PIVOT SCREW	MFP15025-XX	4
11	PIVOT SHAFT SCREW	MFP12020-XX	1
12	RIGHT DROPOUT PIVOT SHAFT	MFP11031	1
13	LEFT DROPOUT PIVOT SHAFT	MFP11032	1
14	PIVOT SPACER	MFP11080	2
15	PIVOT SHAFT 77mm	MFP15044-XX	1
16	PIVOT NUT	MFP11011-XX	2
17	PIVOT SPACER	MFP15026	4
18	PIVOT NUT	MFP15041	2
19	FLAT WASHER #10	MFV00103	3
20	SOCKET BUTTON SCREW M5x0.8 X 12mm	MFV07003	3
21	REAR HUB AXLE	-	1
22	BASH PLATE ALUMINUM	MAGC15002	1

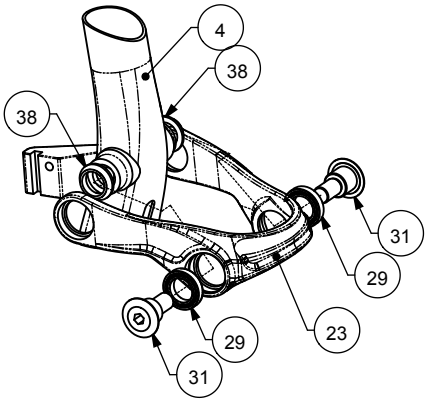
XX = Parts Color Code
01: Black
02: Titanium
03: Gold
04: Red
07: Charcoal



BL PIVOT

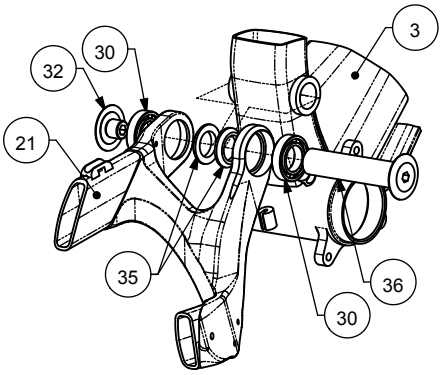


DO PIVOT

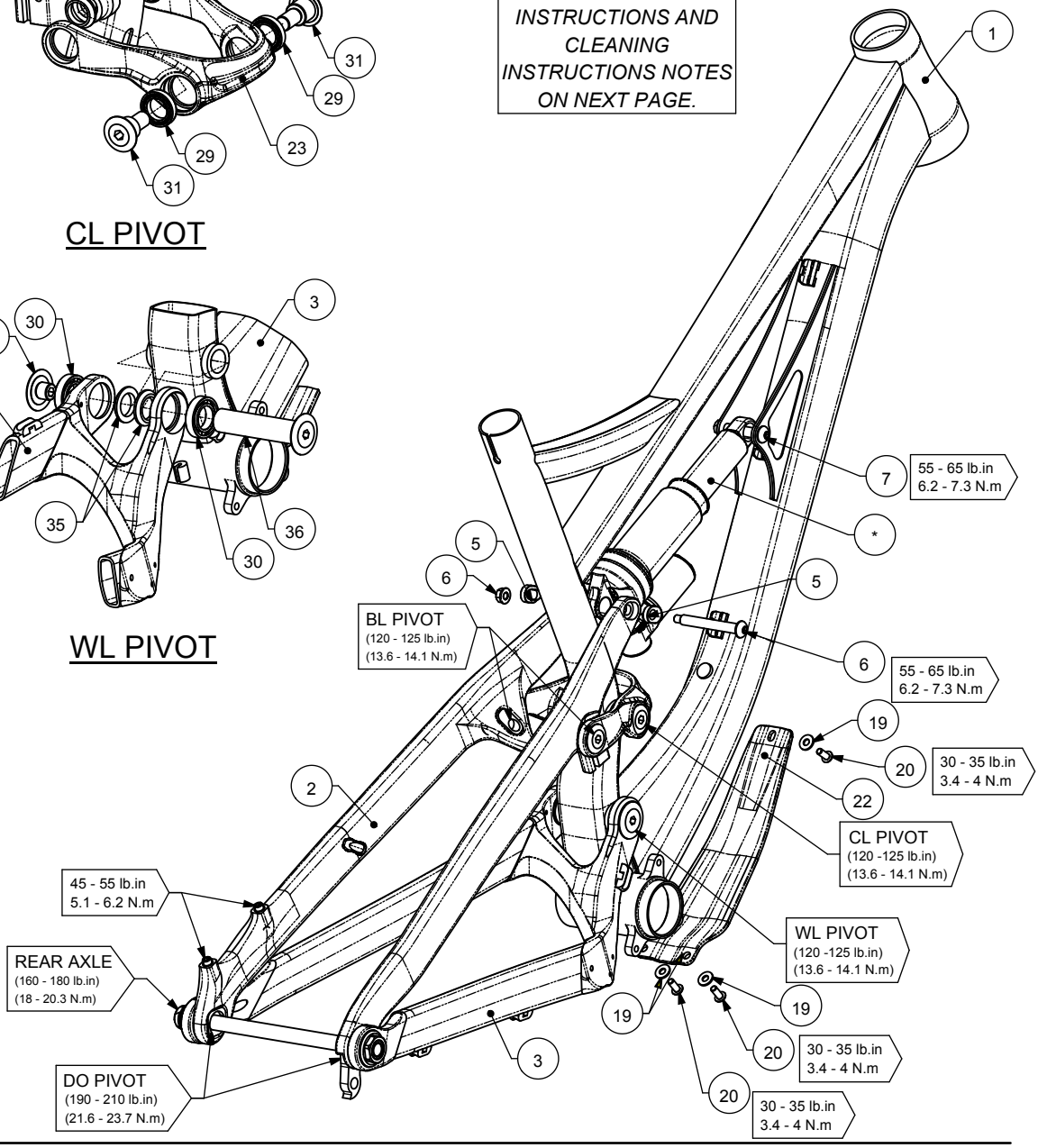


CL PIVOT

WARNING:
MAKE SURE TO CAREFULLY READ THE ASSEMBLY INSTRUCTIONS AND CLEANING INSTRUCTIONS NOTES ON NEXT PAGE.



WL PIVOT



ASSEMBLY INSTRUCTIONS:

1- THOROUGHLY CLEAN THE INTERIOR OF EACH BEARING HOUSING TO REMOVE ANY DIRT OR OLD GREASE;

2- APPLY HIGH QUALITY WATERPROOF GREASE ON THE INSIDE FACE AND INSIDE DIAMETER OF ALL BEARING HOUSINGS BEFORE PRESS-FIT;

3- APPLY HIGH QUALITY WATERPROOF GREASE TO ALL PIVOT PARTS THAT CONTACT WITH THE INNER DIAMETER OF THE BEARINGS (EX.: MFP15044);

4- APPLY HIGH QUALITY WATERPROOF GREASE TO ALL NON-THREADED METAL-TO-METAL INTERFACES (EX.: PLANAR FACE OF THE PIVOT SPACER No1 (MFP11080) THAT CONTACTS THE LATERAL FACES OF THE FRONT TRIANGLE WL PIVOT). THESE INSTRUCTIONS ALSO APPLY TO THE SHOCK ASSEMBLY;

5- UNLESS OTHERWISE SPECIFIED, APPLY BLUE LOCTITE 242 ON ALL THREADS BEFORE ASSEMBLY TO THE SPECIFIED TORQUE VALUE;

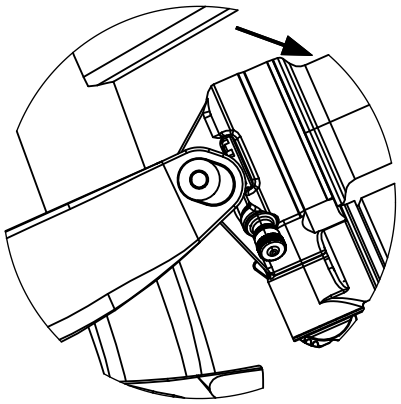
6- HUB OPTIONS: YOU CAN SWITCH FROM A 142MM TO A 135MM HUB SIMPLY BY REPLACING THE PARTS MFP11031 AND MFP11032 BY THE PARTS MFP11061 AND MFP11062;

7- TO PREVENT DAMAGE TO THE FRAME, THE SEATPOST MUST HAVE A MINIMUM INSERTION IN THE SEAT TUBE.

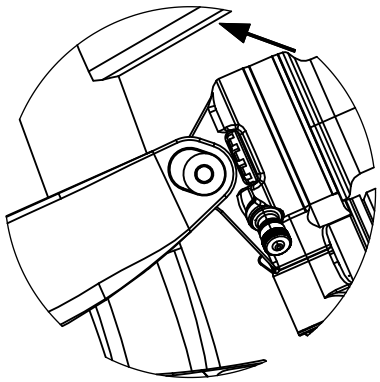
CARBON FRAME:
SMALL / MEDIUM - 70MM INSERTION
LARGE / X-LARGE - 100MM INSERTION

ALUMINIUM FRAME:
SMALL / MEDIUM / LARGE / X-LARGE - 100MM INSERTION

8- FRG ADJUSTABLE: THIS DESIGN ALLOWS RIDERS TO CHOOSE BETWEEN A LOW OR HIGH POSITION. WITH FRG ADJUSTABLE TECHNOLOGY, YOU CAN FINE-TUNE YOUR RIDE TO PERSONAL TASTES OR SPECIFIC TRAIL TYPES USING A FLIP-FLOP PIVOT MECHANISM THAT SLIGHTLY CHANGES THE BIKE'S GEOMETRY. FOR THE SPARTAN, THIS ADJUSTMENT IS PROVIDED BY THE SHOCK ADJUSTEUR (MFP15023) AS SHOWN BELOW.



LOW POSITION



HIGH POSITION

CLEANING INSTRUCTIONS:

IT IS A WELL KNOWN FACT THAT A CLEAN BIKE PERFOMS BETTER. DEVINCI RECOMMENDS WASHING YOUR BIKE REGULARLY USING A BRUSH AND SOAPY WATER. HOWEVER, DEVINCI DO NOT RECOMMEND THE USE OF A PRESSURE WASHER, SINCE THIS MAY SIGNIFICANTLY REDUCE THE SERVICE LIFE OF BALL BEARINGS. EVEN THOUGH OUR BALL BEARINGS ARE EQUIPPED WITH HIGH QUALITY DOUBLE-LIP SEALS, HIGH PRESSURE WATER CAN STILL PASS THESE SEALS AND REMOVE THE GREASE INSIDE THE BEARING. THIS MAY CAUSE PREMATURE CORROSION AND WEAR OF THE BALL BEARINGS.

TECH | SQUEAKS ‘N’ CREAKS

A bicycle is intended to ride in different environments regardless of the weather, to be ridden occasionally or year-round by professionals and beginners, a bicycle is an integrity of mechanisms that needs some maintenance. After using your bicycle for some time, it may begin to generate some creaking noises, squeaks and all sort of different weird, annoying noises. Don’t be worried, you are riding your bicycle in the purpose of its creation if you’re hearing these noises. It is normal and it only means that you need to give your bicycle some loving. However, if after periodic maintenance these noises are still heard, these are symptoms that shows you need to take some more investigation to uncover and fix these problems.

The following simple steps will guide you through the most common areas of squeaking/creaking noises, they will provide you the procedure in order to make them cease and ride your bicycle smoothly again. Never forget that these annoying noises also mean that there might be possibility of serious safety issues if not dealt with. If after following all these simple steps, you are still experiencing some problems with your bicycle, we highly recommend you bring it to your local Devinci Authorized Dealer for further investigation.

Enjoy the ride

DRIVETRAIN ASSEMBLY

1	CHAINRING BOLTS	DUE TO THE CONSTANT TENSION AND FORCES TO WHICH CHAINRINGS ARE EXPOSED, THEY REQUIRE REGULAR TORQUE INSPECTIONS TO ENSURE THEY DO NOT TURN FREELY. PLEASE REFER TO THE CRANK'S OWNER MANUAL FOR PROPER SPECIFICATIONS AND TIGHTENING ORDER.
2	BOTTOM BRACKET	LOOSE BOTTOM BRACKET CUPS CAN ALTER THE FRAME BB THREADS AND CREATE LOUD CREAKING NOISES IF NOT DIAGNOSED/FIXED QUICKLY. THEY CAN BE HARD TO DIAGNOSE AND ISOLATE DEPENDING ON A LOT OF DIFFERENT FACTORS. TAKING YOUR BICYCLE TO YOUR DEVINCI AUTHORIZED DEALER IS ALWAYS PREFERED TO TRYING TO OVERHAUL THE WHOLE UNIT BY YOURSELF AS SPECIAL TOOLS/PROCEDURES ARE NEEDED. REMEMBER THAT IF YOU DECIDE TO PERFORM THESE CORRECTIONS BY YOURSELF, PLEASE ALWAYS REFER TO THE RESPECTIVE PART OWNER'S MANUAL AND FOLLOW THE OVERHAUL PROCEDURE OR YOU MAY RISK VOIDING THE WARRANTY.
3	REAR DERAILLEUR & HANGER BOLT	DUE TO THE CONSTANT TENSION AND FORCES TO WHICH THE REAR DERAILLEUR/HANGER BOLT ARE EXPOSED, THEY REQUIRE REGULAR INSPECTION AND TIGHTENING. MOST BICYCLE DERAILLEUR HANGERS USE A 5MM HEX, HOWEVER THRU-AXLE DROP-OUTS AND OTHER DERAILLEUR SYSTEMS MIGHT NEED SPECIAL TOOLS/TIGHETNING PROCEDURES. PLEASE ALWAYS REFER TO THE MANUFACTURER'S OWNER MANUAL BEFORE PROCEEDING.
4	PEDALS	MAKE SURE YOUR PEDALS ARE ALWAYS PROPERLY TIGHTENED WITH THE HELP OF AN 15MM PEDAL WRENCH OR HEX KEYS. IT IS IMPORTANT TO ALWAYS REMEMBER THAT THE NON-DRIVE SIDE IS ALWAYS REVERSE THREADED. MAKE SURE YOU ALWAYS LUBRICATE/GREASE THE THREADS PRIOR TO INSTALLATION, AND REFER TO THE MANUFACTURER'S OWNER MANUAL TO DETERMINE IF A WASHER BETWEEN THE PEDAL AND CRANK-ARM INTERFACE IS REQUIRED BEFORE TIGHTENING TO THE PROPER TORQUE.
5	CHAIN WEAR	DUE TO THE CONSTANT TENSION AND FORCES THE CHAIN IS ALWAYS UNDER, HAVING A WORN-OUT CHAIN MIGHT GENERATE NOISES FROM THE ENTIRE DRIVE-TRAIN. ON TOP OF BEING NOISY, AN USED CHAIN WILL DETERIORATE THE CHAINRING AND CASSETTE LIFE. WE RECOMMEND YOU MEASURE YOUR CHAIN-WEAR WITH PROPER TOOLS OFTEN TO MAXIMIZE YOUR OVERALL DRIVE-TRAIN LIFE.
6	CASSETTE ASSEMBLY	DUE TO THE CONSTANT TENSION AND FORCES THE CHAIN IS ALWAYS UNDER, HAVING A LOOSE CASSETTE ASSEMBLY CAN GENERATE LOUD CREAKING NOISES WHEN PEDALING. PLEASE REFER TO THE MANUFACTURER'S OWNER MANUAL FOR PROPER INSTALLATION/MAINTENANCE PROCEDURES.
7	BRAKE BOLTS - ROTOR BOLTS	DUE TO THE CONSTANT BRAKING FORCES V-BRAKES/DISC-BRAKES ARE ALWAYS UNDER, LOOSE BOLTS WILL GENERATE A LOT OF VIBRATIONS THROUGHOUT THE FRAME WHICH CAN EVEN BE TRANSFERED TO LOUD NOISES WHEN APPLYING THE BRAKES. MAKE SURE TO APPLY BLUE LOCTITE TO THE MOUNTING HARDWARE THREADS BEFORE TENSIONING TO THE MANUFACTURER'S SPECIFICATIONS.

COCKPIT ASSEMBLY

1	SADDLE RAILS / SEAT POST CLAMP	EVERY SINGLE-BOLT SEATCLAMP ON A DEVINCI BICYCLE REQUIRES A HIGH TORQUE. THAT'S WHY A TORQUE WRENCH MUST BE USED TO OBTAIN PROPER TORQUE SPECIFICATIONS, OTHERWISE A LOUD CREAKING NOISE CAN BE HEARD WHILE PEDALING SEATED ON THE SADDLE. MAKE SURE YOU SLIGHTLY GREASE ALL METAL-TO-METAL CONTACT POINTS, ESPECIALLY THE MECHANISM CLAMP BOLTS.
2	SEAT CLAMP	WHEN QUICK-RELEASE SEATCLAMPS ARE USED, MAKE SURE THE BOLT IS ADJUSTED SO THAT PROPER TIGHTENING FORCE IS APPLIED WHEN THE LEVER IS IN THE CLOSED POSITION. WHEN BOLT-ON SEATCLAMPS ARE USED, MAKE SURE THE BOLT IS PROPERLY TIGHTENED. KEEP IN MIND NOT TO USE GREASE ON CARBON SEATPOSTS AND/OR FRAMES; USE SPECIAL CARBON ASSEMBLY PASTE INSTEAD. PLEASE ALWAYS REFER TO THE MANUFACTURER'S OWNER MANUAL FOR PROPER TORQUE SPECIFICATIONS.
3	STEM BOLTS	AS PART OF THE COCKPIT ASSEMBLY, STEM CAP BOLTS SHOULD BE INSPECTED OFTEN TO MAKE SURE PROPER TORQUE IS APPLIED AS REFERENCED IN THE STEM OWNER'S MANUAL. DO NOT USE GREASE ON CARBON STEER TUBES AND CARBON HANDLEBARS, ALWAYS REFER TO THE PART'S OWNER MANUAL FOR PROPER INSTALLATION.
4	HEADSET	IN ORDER TO WORK PROPERLY, THE HEADSET ASSEMBLY REQUIRES THE STEM BOLTS TO BE TIGHTENED TO SPEC TO KEEP EVERYTHING TIGHT AND SECURE. FOR CARBON STEER TUBES, A PROPER CARBON SPECIFIC EXPANDER PLUG NEEDS TO BE USED INSTEAD OF A REGULAR STAR NUT. PLEASE ALWAYS REFER TO THE MANUFACTURER'S OWNER MANUAL FOR PROPER ASSEMBLY.

SUSPENSION ASSEMBLY

5	REAR SHOCK MOUNTING HARDWARE	DRY SHOCK BOLTS AND/OR LOOSE SHOCK BOLTS CAN GENERATE SOME NOISE IF NOT TAKEN CARE OF. WE RECOMMEND LUBRICATING THE SHOCK BOLTS BEFORE ASSEMBLY, AND MAKE SURE TO APPLY SOME BLUE LOCTITE ON DRY AND CLEAN THREADS BEFORE TORQUING TO SPEC.
6	SUSPENSION PIVOT BOLTS	EACH AND EVERY PIVOT BOLT SHOULD BE TORQUED TO ITS PROPER SPECIFICIATION WITHIN THE DEVINCI SPLIT-PIVOT MANUAL. IN MOST ENVIRONMENTS, LUBRICATINGS THOSE PIVOT POINTS AND BOLTS SHOULD ELIMINATE ANY CREAKING ISSUES WITHOUT THE NEED FOR BEARING EXTRACTION. IF NOISES PERSIST AFTER LUBRICATION, PLEASE VISIT YOUR LOCAL DEVINCI AUTHORIZED DEALER FOR BEARING REMOVAL/INSTALLATION AND OVERHAUL PROCEDURES (SPECIAL BEARING EXTRACTOR NEEDED).

WHEEL ASSEMBLY

1	QUICK-RELEASE SKEWERS	WHEEL QUICK RELEASES SHOULD ALWAYS BE UNDER PROPER TENSION AND PROPERLY FASTENED. THERE SHOULD BE AMPLE RESISTANCE WHEN TRYING TO OPEN THE QUICK RELEASE, IF NOT, TURN THE BOLT UNTIL A SIGNIFICANT AMOUNT OF FORCE IS REQUIRED TO CLOSE THE QUICK RELEASE. MAKE SURE TO CHECK THE TENSION ON EACH QUICK RELEASE BEFORE AND AFTER EVERY BIKE RIDE.
2	REAR WHEEL THREADED AXLES	MAKE SURE TO LUBRICATE/GREASE THE REAR AXLE AND ITS THREADS BEFORE TENSIONNING IT TO ITS PROPER TORQUE. FAILURE TO PERFORM THESE ACTIONS WILL RESULT IN EITHER A LOOSE AXLE, SEIZED AXLE AND/OR CREAKING NOISES WHEN PEDALLING FORCES ARE APPLIED.

MISC ASSEMBLY

3	WATER BOTTLE CAGES	AS SIMPLE AS THEY ARE, WATER BOTTLE CAGES WHEN NOT TIGHTENED PROPERLY CAN GENERATE RATTLING NOISES. REFER TO THE MANUFACTURER'S OWNER MANUAL FOR PROPER INSTALLATION AND TORQUES.

OWNER'S MANUAL FOR MULTI-SPEED BICYCLES

This manual contains important safety, performance and maintenance information. Please read this manual before you take your first ride on your new bicycle. Keep the manual handy for future reference.

Pour obtenir une version française de ce document, communiquez avec nous via Internet à l'adresse : service@devinci.com

NOTE: This manual is not intended as a comprehensive use, service, repair or maintenance manual. If you have any questions about your bicycle which are not answered in this manual, of if you are not certain that you understand any of the answers in this manual, please consult with your authorized Devinci dealer.

01 IMPORTANT WARNING

Most sports carry the risk of injury, damage or both, and bicycling is no exception. By choosing to ride a bike, you are aware of these inherent dangers and risks. You also agree to take full responsibility for those risks. Neither the manufacturer, nor the distributor, nor the person who sold your bike, nor the people that do the maintenance of the trails where you ride can be held responsible. Since you take full responsibility, it is imperative that you read and fully understand the content of this manual.

It is your duty to do the proper maintenance on your bicycle and, therefore, substantially reduce the risk of injury.

Riding a bicycle can be a very dangerous activity, even under the best circumstances. Also, since it is impossible to predict all the situations you may face, this manual is not meant to describe every aspect of safe use. Many risks inherent to riding a bike cannot be predicted or avoided and they are, therefore, your sole responsibility.

This manual uses WARNING and CAUTION tabs that warn you about consequences that might occur because of bad inspection or inadequate maintenance of your bicycle. Also, not respecting traffic laws can lead to serious injury or damage. The symbol ⚠ and the word WARNING always indicate risk of serious injury that could even lead to death. The symbol ⚠ and the word CAUTION imply the possibility of serious damage to your bicycle and the risk of voiding your warranty.

Warning intended for parents and guardians

It is tragic to realize that minors are the most likely to be involved in bicycling accidents. As parent or guardian, you are entirely responsible for your children's activities and therefore of their security. Those responsibilities consist, among other things, of making sure that the following criteria are met:

- The size of the bicycle is adequate for your children;
- The bicycle is in good working order and requires no maintenance whatsoever;
- Your children know how to use the bicycle safely;
- You both know and apply your local traffic laws;
- You apply common sense and a responsible attitude when bicycling.

As the parent or the guardian, you should read this manual in its entirety before letting your children use the bike. Moreover, make sure your child always wears a regulation standard helmet when bicycling.

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02 YOUR AUTHORIZED DEVINCI DEALER

Your authorized Devinci dealer is committed to guiding you in the process of choosing a bike with accessories that really are adapted to the type of cycling you wish to practice. It also provides help concerning maintenance, so you can fully benefit from your investment. Authorized Devinci staff possess the knowledge, the experience and the necessary tools to adequately repair and provide reliable advice.

However, your dealer cannot make decisions on your behalf and be held responsible for your lack of knowledge, experience, qualifications or common sense. On the other hand, your authorized Devinci dealer can take the time to explain how your bike and its components work or what accessories will meet your specific needs.

If you have a problem or need information, consult your authorized Devinci dealer immediately, who will be glad to answer and guide you.

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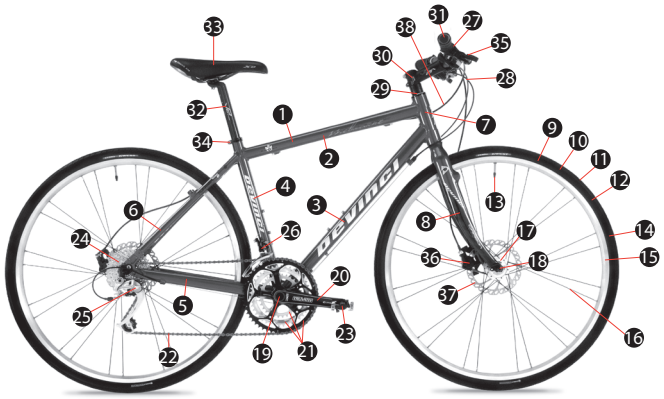
03 NOMENCLATURE FOR YOUT BIKE



1. Frame
2. Top tube
3. Down tube
4. Seat tube
5. Chain stay
6. Seat stay
7. Head tube
8. Fork
9. Wheel
10. Tire
11. Tread
12. Sidewall
13. Valve
14. Inner tube
15. Rim
16. Spokes
17. Hub
18. Quick release
19. Bottom bracket
20. Crank
21. Chain rings
22. Chain
23. Pedal
24. Cassette
25. Rear derailleur
26. Front derailleur
27. Shifter
28. Shifter cables
29. Headset
30. Stem
31. Handlebar
32. Seat post
33. Saddle
34. Seat collar
35. Brake lever
36. Caliper
37. Brake disc
38. Brake cable

04 THE BIBYCLE FAMILIES

4.1 Road

The term “road bike” refers to any bicycle designed for paved roads or paths. Like most products that grow in popularity, so does their design to meet the specific demands of the consumer. The road bike can be further divided into four types: Road, Time-trial/Triathlon, Touring and Cyclo-cross.

4.2 All-terrain

The term “all-terrain” refers to any bicycle designed for off-road riding. Since the beginning, off-road riders have pushed the limits of their bikes and begun to ride a wider variety of terrain, forcing the market to split into four categories of mountain bikes: XC racing, XC Trail, Freeride and Downhill.

4.3 Hybrid

The desire to ride freely on a comfortable bike, both on cycle paths and in the city, has led to both on cycle paths and in the city, has led to bike and the mountain bike, the hybrid is well-adapted to touring trips or your daily transportation to work. The hybrid offers a wide range of gear ratios and large wheels for a smoother ride than the road bike and a faster one than the all-terrain.

4.4 Comfort

The comfort bike is meant for those who enjoy life on the paved paths. With larger tires than the hybrid bike and a more comfortable saddle, it allows a straighter position for riders looking for a pleasant and safe ride. The comfort bike is an excellent choice for cyclists that prefer comfort over speed.

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05 FUNDAMENTALS OF CYCLING

5.1 Getting started

It is strongly recommended that you read this manual thoroughly before your very first ride. Make sure you understand the following points and be sure to refer to the detailed sections if you have any doubts. Remember that your authorized Devinci dealer is also available to answer your questions.

5.1.1 Bike Dimensions

First, you should know the answers to the following questions:

a. Is the size of your bike adequate for you? To check, refer to section 5.2.1. A bike that’s too large or too small results in loss of stability and could make you fall.

b. Is your saddle properly adjusted? To check, refer to section 5.2.2. Before adjusting the saddle by yourself, make sure you respect the minimal insertion height by referring to section 7.2.

c. Have you correctly tightened the saddle and the seat post? If so, you shouldn’t get any movement whatsoever.

d. Are the handlebars and the stem in the right positioned for you? Before adjusting, make sure you refer to section 5.2.3 to learn how to do it the right way.

e. Are the reach and angle of your brakes convenient for you? It is possible to adjust your brakes to make them more comfortable to use. Please refer to section 5.2.4.

f. Do you know precisely how everything works on your bike? If you to have any doubts, do not hesitate to contact your authorized Devinci dealer who will be pleased to describe and teach the functioning of every mechanism to you.

5.1.2 Security and Bicycling

a. A regulation standard helmet by CSA (Canada), CPSC, Snell, ASTM (America) or CEN (Europe) is an essential piece of equipment. Do you have one? It is imperative that you ALWAYS wear a regulation standard helmet when riding your bike. Also, make sure it fits your head, that it is well-adjusted and that the chin strap is securely buckled. The use of a poorly adjusted, wrongly positioned and/or incorrectly attached helmet may cause serious injury and could even lead to death.

b. Do you own other specific safety equipment? In certain provinces or states, you may be obliged to use other safety equipment. It is your responsibility to know and respect the safety rules in effect wherever you ride your bike.

c. Are you familiar with the use of your wheel quick releases? If not, make sure you refer to section 7.1 to understand their functioning. The use of a bike with incorrectly adjusted wheel quick releases is very dangerous since the wheel could become loose or even unlock and fall, causing damage and/or serious injury that could lead to death.

d. Do you know how to operate toe clips or clipless pedals? If your bike is equipped with one or the other device and you don't fully understand their functioning please refer to section 7.6 or 7.7. It is very important that you acquire the skills to safely engage and disengage these pedal models. In order to do so, you need to take time in a safe place to practice and learn how they work, one foot at a time. The technique is tricky at first and there is a risk of falling, which could cause injuries.

e. Is your bike equipped with a front suspension? If so, refer to section 7.8. When braking, a weight transfer tends to compress the front suspension, resulting in a lifting force applied to the rear of your bike that could throw you over the handlebars. It is important that you learn how to use a bike equipped with suspensions in a safe place before doing a real ride. Consult your suspension user manual for more information on how to adjust your suspension. Safety mechanical inspection.

It is crucial that you make a rigorous mechanical inspection before using your bike. Refer to section 5.4 to find out precisely what has to be checked.

Congratulations, you are now up for your first ride!

Wearing your helmet, go get acquainted with your new bike. We recommend you do a short ride to familiarize yourself with the operations of all the different components.

Make sure you learn to brake, to shift gears, engage and disengage your toe clips or clipless pedals as well as understanding how your suspension responds and operates. This learning curve is inevitable and will make you appreciate much more the rides that follow by making them safer at the same time.

Don't forget to read the manual in its entirety!

5.2 Tuning your bike according to your morphology

It is very important that your bike be the right size for you. A bike that is either too large or too small is likely to be harder to control and less comfortable.

⚠ WARNING: If the size of your bike is incorrect, you risk losing control and falling. If the size happens to be incorrect, ask your authorized Devinci dealer to exchange it before you start using it.

5.2.1 Dimensions

Your authorized Devinci dealer will help you choose the right size of bike according to the information provided. If the bike was purchased by someone else, it is imperative that the main user confirms that the size is right before using it. If you selected your bike yourself at your dealer, your dealer will indicate what model is best suited for you.

First of all, the simplest way to check your frame size is to check the standover height. This is defined as the distance between your crotch and the top tube of the frame when standing over the bike with one foot on each side of it. Before you measure it, make sure you wear your bike shoes. Between the saddle and the handlebars as shown on figure 1, place your feet on the ground and jump on your heels. Has your crotch touched the top tube? If yes, your bike is too big for you.

If you intend to use your bike only on paved surfaces, then aim for a standover height of at least 2.5cm. If you intend to use it on bike paths and on unpaved roads, then aim for at least 7.5cm. Finally, if you expect to do some off-road or mountain biking, then you should aim for a standover height of more than 10cm.

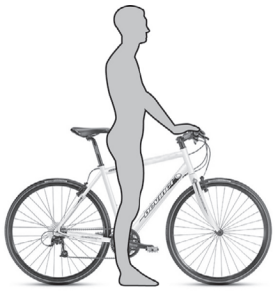


Figure 1

Figure 2

5.2.2 Saddle positioning

In order to achieve greater comfort and optimal performance, the saddle should be positioned and adjusted properly. Your authorized Devinci dealer has already placed the saddle in a general position that is likely to satisfy most people. However, if you feel like it could be better, then do not hesitate to go back to your authorized Devinci dealer to have it positioned perfectly. You could also complete the following operations yourself if you have the right tools and necessary skills.
Refer to figures 3, 4 and 5 to determine in which category your saddle falls.

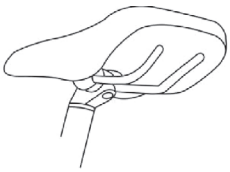


Figure 3

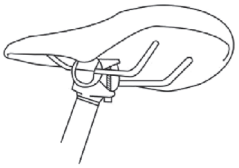
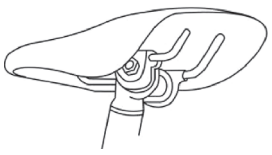


Figure 4



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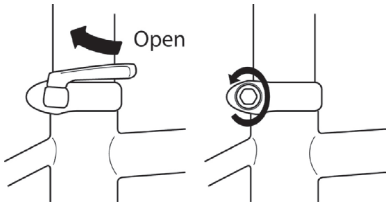

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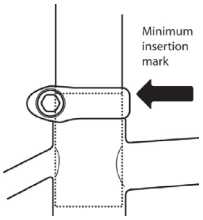

Figure 7

There are three different settings for a saddle:

A. The Height

The height of your saddle depends on the length of your legs. Generally, we assume your saddle is well adjusted when you can barely touch the pedal at its lowest position with your heel, when seated on the saddle. The procedure goes as follows: sit on your saddle, place your heel on the pedal and extend your leg to position the crank arm parallel to the seat tube. Your saddle is too low if your leg is bent at the knee while your heel touches the pedal. On the other hand, it is too high if your hip does not remain straight (see figure 2). Your saddle needs to be adjusted until the ideal position is obtained.

In order to adjust the height of your saddle, you will need to loosen the quick release of the seat collar bolt, referring to figure 6 to determine which one you have. Then, move the seat post up or down according referring to figure 6 to determine which one you have. Then, move the seat post up or down according to your needs. Check the straightness of the saddle with respect to the length of the bike and tighten the seat collar carefully to firmly immobilize the seat post.

⚠ WARNING: Your seat post has a minimum insertion line which limits the maximum height you can safely reach. Under no circumstances should this line be visible after positioning the saddle (see figure 7). Placing the saddle otherwise could result in a rupture of the seat tube inducing a loss of control that could lead to serious injury or even death.

B. The Fore-and-aft positioning

Loosen the clamp by referring to figures 3, 4 and 5 and slide the saddle toward the front or the back as desired. First, place the saddle in the middle and make it slide in the desired direction until the most comfortable position is reached.

C. The Tilt

Even though many cyclists opt for a horizontal saddle, a few prefer to have it tilted. If this interests you and your saddle allows it (see figure 5), just loosen the saddle clamping mechanism and tilt the saddle as desired. Be sure to tighten back the mechanism firmly.

⚠ WARNING: After moving your saddle, tighten the clamping mechanism vigorously and do it before attempting to ride your bike. In order to make sure it is properly clamped, grab the two ends of your saddle and try to move it up, down, sideways, try to tilt it and even twist it every possible wayIf it moves, contact your authorized Devinci dealer.

Small changes in your saddle positioning are enough to increase both your comfort and performance levels. It is strongly recommended that you adjust the saddle in one direction at a time. Do it many times, little by little, until you find the best position for you.

If you have not found a comfortable configuration after adjusting your saddle in every direction, maybe another type of saddle would suit you better. Everyone is different and that could explain the abundance of different saddle models on the market, offering a myriad of sizes, shapes and stiffness. Your dealer can guide you in the process of choosing an appropriate saddle that will suit your needs and expectations.

⚠ CAUTION: Riding a bike equipped with a saddle that does not correctly support your pelvic area can induce pain or numbness. Also, injuries to your nerves and to your blood vessels could result from an inappropriate saddle. If you happen to feel pain or numbness, adjust your saddle differently. If it persists, contact your authorized Devinci dealer to find out about ergonomic models that might suit you better.

5.2.3 Handlebar positioning

If your bike has a stem clamped directly on the outside of the steer tube, your authorized Devinci dealer should adjust your handlebars height by using cylindrical spacers above or under it. Do not attempt this modification by yourself, ask your authorized Devinci dealer instead.

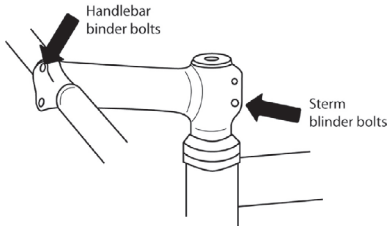

Figure 8

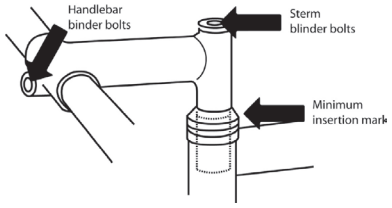

Figure 9

On many bikes, it is possible to adjust the height of the handlebars slightly yourself by changing the stem height. To do so, loosen the stem clamping bolt by a few turns as shown on figure 9. Use a rubber hammer to move the stem if it appears to be jammed. You can now adjust the height of the stem and tighten back the bolt properly once you have reached the desired setting. You should never be able to move the alignment of the handlebars and the stem with your hands. Moreover, there is a minimum insertion line on your stem; make sure it is never visible. It is not recommended to make this modification by yourself, this one requires a certain amount of experience. Ask your authorized Devinci dealer if you're in doubt.

Now check if your handlebars turn normally and that your brakes are working properly.

⚠ CAUTION: On a few bike models, the handlebars height adjustment could modify the tension in the front brake cable, resulting in the malfunctioning of your front brakes. If the brake pads are closer or further apart from the rim, contact your authorized Devinci dealer before using your bike to have your brakes adjusted.

⚠ WARNING: The minimum insertion line of your stem shall not be higher than the head set as shown on figure 9. If visible, there is a risk of damaging your steer tube which could result in a loss of control and a fall, leading to serious injury or even death.

If you wish to modify the angle of your handlebars, you can loosen the bolt of its clamping system, rotate the handlebars as desired, center them and tighten the bolt vigorously. You shouldn't be able to change the alignment of the handlebars with the stem with your hands.

⚠ WARNING: A weak tightening of the retaining bolt of your stem or of the handlebars is likely to decrease the handling of your bike and risk causing a loss of control and a fall. Place yourself facing the bike, squeeze the front wheel between your legs and try turning the handlebars. If you can change the alignment between your stem and your front wheel, the bolts are definitely not tightened enough. The alignment of the handlebars with respect to the stem should also be identical.

5.2.4 Brake levers and shifters position

Upon delivery of your bike, your authorized Devinci dealer has assembled the brake levers and shifters in the standard position. It is possible to modify their angle and their position with respect to the handlebars. Ask your authorized Devinci dealer to adjust them or to show you the procedure.

5.2.5 Brake tuning

Many models offer the possibility of adjusting the reach of your brake levers and shifters. If you feel it is difficult to brake or to shift gears properly, then ask your authorized Devinci dealer to adjust them according to your needs.

⚠ WARNING: It is essential that all your stopping power is available within the reach that the brakes are adjusted in. As a matter of fact, a shorter brake reach implies a thinner functioning range. Indeed, an insufficient reach could prevent the use of your maximum braking power, which can lead, of course, to loss of control, falls, serious injury or even death.

5.3 Safety equipment

⚠ WARNING: Many countries have laws that require the use of certain safety devices. It is your duty to know the legislation of the countries you use your bike in and to comply with those requirements by using these safety devices.

5.3.1 Helmet

Even though the use of the helmet is not required in every country, it is strongly recommended to use one that is regulation standard (see section 5.1.2). The worst accidents involve head injuries that could be avoided by wearing a helmet. Your authorized Devinci dealer has many good-looking models that will certainly meet your expectations.

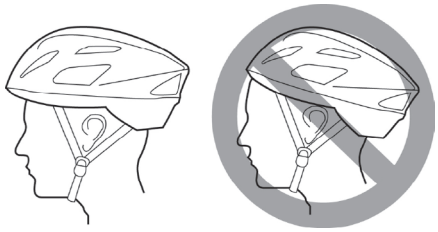

Figure 10

Make sure the helmet you choose is well-adapted to your head, not to your look. Always place it correctly as shown on figure 10 and secure it completely. Ask your authorized Devinci dealer to guide you in the process of selecting your helmet.

⚠ WARNING: You should always wear a regulation standard helmet when riding your bike. It is important to secure the chin strap. Consult your helmet user manual for more information. The use of a regulation standard helmet can prevent serious or even deadly injury

5.3.2 Reflectors

The reflectors are an essential component of your bike that greatly improve your safety. They are designed to reflect car lights and street lights and therefore, make you easier to spot.

⚠ WARNING: Run a regular check to verify that your reflectors and their mounting brackets are functional, clean, straight and solidly mounted. Consult your authorized Devinci dealer if they are broken or damaged, to get them replaced.

⚠ WARNING: Never remove your front or rear reflectors or their mounting brackets, because they are designed to push away from the brake cables and prevent interference with the wheels in the event they break. Such interference could result in sudden wheel stop, leading to loss of control that could cause serious or even deadly injuries.

⚠ WARNING: Never remove your bike reflectors. They are very important safety devices that help increase significantly your visibility. Indeed, if you remove them, there is a risk of collision between you and the other road users who will not see you properly. Being hit by a car can result in very serious injuries or even death. However, do not forget that reflectors are not intended to replace lights. Be sure to equip your bike with lights according to the local legislation.

5.3.3 Lights

If you use your bike at night, it has to be equipped with lights to make your surroundings visible and make you visible to your surroundings. From a legal point of view, a bicycle is as much a road vehicle as a car. Therefore, you are required to have a white front light and a red one on the back, when riding at night. Your authorized Devinci dealer can guide you in choosing the proper lighting devices.

⚠ WARNING: The reflectors are not intended to replace lights. You are required to equip your bike with lighting devices according to the legislation in effect in the areas where you use it. It is dangerous to ride without reflectors and lights at night or when the visibility is poor.

5.3.4 Pedals

Performance bikes are often equipped with pedals with sharp edges and dangerous parts. These are designed to increased security and performance by improving their adherence with the cycling shoes. If you have this pedal type, be careful and practice their use on an unpaved surface. Depending on your level, you might want to choose a less aggressive pedal model. Consult your authorized Devinci dealer to choose a convenient pedal model.

5.3.5 Eyewear

When riding a bike, there is a high risk of getting dust, mud, bugs and other projectiles in the eyes. Therefore, it is strongly recommended that you wear eye protection adapted to riding. Consult your authorized Devinci dealer to receive assistance choosing your eyewear.

5.4 Mechanical safety inspection

5.4.1 Nuts, bolts and clamps

Lift the front wheel five to ten centimetres and let it bounce heavily on the ground. Nothing should be loosened. Do a quick visual and physical inspection of every part of your bike to make sure of that. In case you find any loosened parts or accessories, tighten then immediately with the proper tools. If you have any doubts, ask your authorized Devinci dealer.

5.4.2 Tire and wheels

Your tires must be properly inflated. To check the pressure, place one hand on the saddle and the other on the handlebar and stem junction, then push vigorously towards the ground using your weight. Examine the resulting effect on each tire. Do they appear properly inflated? If not, inflate or deflate them accordingly. Refer to section 7.5 for more detailed instruction and information.

Make sure the tires are still in good condition. Turn the wheels slowly and check for damage, cuts or excessive wear on the tires. Replace the damaged tires before using your bike. Redo the same exercise, checking the wheels this time. Verify their straightness and trueness, the absence of lateral loosening and the constancy of the distance between the brake pad and the rim. Consult your authorized Devinci dealer if anything looks suspicious or to get your wheels true.

⚠ WARNING: The brake functioning largely depends on your wheel state. Truing a wheel requires very specific skills and tools. Never attempt this operation if you lack the skills or the tools. Instead, consult your authorized Devinci dealer.

5.4.3 Brakes

To check that your brakes are functioning properly, press firmly on the brake levers. Make sure the brake pads close in correctly on the rim. Also, check that the brake cable stays in place. Do the brake pads touch the rim when pressing the brake levers at 2.5cm? Is the brake disc centered in the callipers? Is the disc in contact with the brake pads when not braking? Can you obtain maximum braking power without having the brake levers touching the handlebars? If you found any problems while answering these questions or if you have any doubts concerning your brakes after this inspection, you should have your brakes checked immediately. Do not use your bike until the brakes are fully functioning. Refer to section 7.3 for more detailed instructions or contact your authorized Devinci dealer.

⚠ WARNING: Using a bike with worn brake pads or simply maladjusted brakes is very dangerous and can cause serious injury or even death.

5.4.4 Wheel and seat post quick releases

Check that your wheel seat post and quick releases are properly clamped. Refer to section 7.1 for more information.

⚠ WARNING: The use of a bike with loosened quick releases is extremely dangerous. A wheel quick release that is improperly tightened may cause wheel wobbling. This could cause damage to your bike and result in injury and could even lead to death.

5.4.5 Handlebar and saddle alignment

Is your saddle parallel to the top tube of your frame? Is your wheel aligned with your stem and perpendicular to your handlebars? Are these parts tightened properly? You should never be able to move any of them with your hands.

5.4.6 Handlebar extremities

Are your handling grips properly attached to the handlebars? Are they in good shape? If not, consult your authorized Devinci dealer to get new grips. If they are missing the end plugs, install new ones before riding your bike.

⚠ WARNING: If your handlebar grips are loosened of damaged, you risk loosing control of your bike and falling. If the end plugs of your handlebar are not protected, you could cut yourself or get seriously hurt.

06 FOR A SAFE AND SMART EXPERIENCE

6.1 Fundamentals of cycling

1. Proceed to the mechanical safety inspection (refer to section 5.4) before every use;
2. Always wear a standard approved helmet (see section 5.1.2);
3. Keep moving parts of your bicycle away from your bodyKeep moving parts of your bicycle away from your body carry;
4. Wear shoes that hold your feet tightly and offer a good adherence with the pedals. Never use your bike wearing sandals or just barefoot;
5. Make sure you know and master every part of your bicycle;
6. Never do jumps with a bike not designed for this purpose. When landing, huge forces are distributed through the bike, generating massive stress levels. The most critical part is certainly the fork that could, if not designed for excessive loads, break and lead to serious or even deadly injury;
7. Adapt your speed to your environment, to the riding conditions and to your level of skills. Make sure you always fully control your bike and that you are at ease with the speed you are going. Never forget the direct correlation between speed and the risk of loosing control;
8. Wear clothes with bright and visible colors that are not likely to get stuck in the moving parts of your bike. Always avoid loose clothing.

⚠ **WARNING: Jumping, riding half-pipe, attempting aerial maneuvers or carrying heavy loads are very dangerous and are not recommended uses of your bike, since they imply high risk of damag ing your bike or causing serious injury that could even lead to death.**

6.2 Road bike Safety Code

1. Know traffic laws and other specific regulations of the region where you ride. Many cities have adopted rules concerning bicycling, sidewalk use, bike licensing, etc. Many countries also have laws concerning helmets and child carriers. Some even have specific traffic laws for bikers;
2. Ride carefully, anticipating and ready to avoid:
   a. surrounding cars that turn, engage, disengage, brake or follow you;
   b. motorist opening their doors on your path;
   c. pedestrians crossing the street;
   d. kids playing on the side of the road;
   e. gully holes, railroad tracks, pot holes, bridge expansion joints, debris or any other objects obstructing your path that might cause damage to your bike and loss of control;
   f. Any other distraction you may encounter on your path.
3. The roads are busy, be careful and respect the other cars, trucks, motorcycles and bicycles. Respect the traffic laws, be patient and tolerant even if others aren't;
4. Learn how to properly hand signal your actions, like right or left turns and stops;
5. Respect the Highway Code: Obey traffic lights and stop signs, look both ways before crossing at an intersection;
6. Observe priority rules and try not to do unexpected maneuvers;
7. Make sure you stay focused at all times and anticipate the possibility of a motorist neglecting, forgetting or even not noticing your presence;
8. Never transport another person, unless it is a young child wearing a regulation standard helmet in a safe and securely mounted standard child carrier;
9. Always use the bike path if possible. On the road, stay on the right side as far as possible from the traffic;
10. Avoid as much as possible riding in bad weather with poor visibility, in dark areas or when you are tired. These conditions are dangerous and tend to substantially increase the risk of injury;
11. Never use headphones while riding since they impair your ability to hear the traffic sounds or the sirens of emergency vehicles;
12. Do not transport luggage that could impair your visibility, disturb the stability and maneuverability of your bike or get jammed in moving parts;
13. Never try to pull or get pulled by any other vehicle;
14. Do not ride under the influence of drugs or alcohol;
15. Do not attempt tricks, wheelies, jumps or any other stunts with your bike.

6.3 Off-road bike Safety Code

1. When riding off-road, help is often far away. Be cautious and prepared; bring all the necessary equipment presented in section 8.2;
2. Never ride by yourself in remote areas. Even when accompanied, inform at least one person of your destination and an estimated return hour;
3. Ride only in mountain biking trails. Do not enter private land and areas with forbidden access;
4. Since it is more dangerous and technically more difficult to do mountain biking than road biking, start by practicing in an easy and safe place;
5. You are not alone on the trails, make sure you respect the other users and be tolerant;
6. Always give priority to pedestrians and be careful not to disturb the fauna. Keep a good distance so as not to frighten them and to avoid their unpredictable moves that could cause losses of control and make you fall;
7. Always stay on trails to prevent damage to the environment. In mud, be careful not to contribute to the soil erosion. You are likely to disturb the fauna and the flora by not following the marked trails;
8. It is your duty to minimize your impact on the environment. Ride responsibly by leaving nature as you found it and by disposing of your garbages in the proper receptacles.

6.4 Riding at night

It is dangerous to ride your bike at night. It is not recommended to let children ride near roads at dusk or at night. Adults also should avoid it as much as possible.

⚠ **WARNING: It is dangerous to use a bike without reflectors or a lighting system at night, at dusk or when visibility is reduced. You could risk serious injury or even death.**

If you ride your bike at dusk or at night, make sure you are completely visible by taking the following pecautions:

1. Wear clothes with bright colors and accessories that make you easier to see, such as reflective vests, reflective arm, wrist, ankle and helmet bands and flashing lights. This will help the motorists and pedestrians detect your presence;
2. Run a regular check to verify that your reflectors and their mounting brackets are functional, clean, straight and solidly mounted;
3. Install a lighting system for the front and the rear of your bike that runs on batteries or by a dynamo. Ask your authorized Devinci dealer for more information;
4. Be careful not to hide your reflectors and/or lights with your clothes or any objects you are carrying.

Adapt your behaviour:

1. Ride slowly;
2. Do not ride in areas with lots of traffic, on roads with a speed limit higher than 50km/h;
3. Avoid very obscure or dangerous areas;
4. Use only paths that are familiar to you.

6.5 Riding on wet surfaces

⚠ WARNING: Rain tends to make roads, paths and trails slippery and increases the braking distance for you as well as for other users you may encounter. Visibility is generally negatively affected. The risk of accident is substantially increased on wet surfaces.

As mentioned earlier, wet surfaces tend to be very slippery, resulting in a substantial loss of maneuverability and braking power. To be sure to safely stop on a wet surface, you must diminish your speed and you must brake earlier and more progressively than normal. In fact, you would not want your wheels to lock up and start skidding. Refer to section 7.3.1 for more details.

6.6 Extreme and competitive use

If you intend to participate in competitions or if you practice downhill, you accept that you are taking greater risks that could cause serious injury or even death. In downhill, you risk reaching speeds as high as those attained by off-road motorcycles and you are then exposed to a similar level of danger. Always wear complete safety equipment including full-face helmet, full finger gloves and a body armor that fully protects your back. Make sure your bike and equipment are in order by having them inspected by your authorized Devinci dealer. Ask the expert riders and the trail managers for information regarding the conditions and the required materials. It is your responsibility to check that you have the correct equipment, including your bike and that it is in working perfect order

⚠ WARNING: Downhill biking can result in serious accidents. Always wear the proper safety equipment and make sure your bike is in perfect working order. In downhill, even the best protection cannot prevent serious injury or even death. Learn how your suspension and braking systems work and respond before attempting downhill or extreme off-road.

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07 TECHNICAL INFORMATION

In order to increase your performance, your safety as well as your fun, it is essential that you understand thoroughly how your bike and its components work. Even if you are an expert rider, the new generation bikes have so many innovations and new technology that you could end up surprised. It is, therefore, strongly recommended you go through this section no matter how much experience you have. For more information, always refer to your authorized Devinci dealer.

7.1 Wheels

7.1.1 Assembly and disassembly

⚠ WARNING: Using a bike with quick releases that are not tightened enough means you risk losing the wheels, resulting in damage to bike and leading potentially to serious injury or even death. It is, therefore, essential that you:

1. Ask your authorized Devinci dealer to explain how the wheels quick releases work so that you can assemble and disassemble them safely;
2. Learn how to safely use a quick release so that you can apply this knowledge;
3. Make sure your wheels are properly clamped before every ride.

A. Adjusting the quick release system

The quick release uses a cam mechanism to exert a significant force on the wheel hub when placed in the closed position and a small force in the open position. Since it is adjustable, you need to learn how to operate it to ensure optimal use and a safe binding

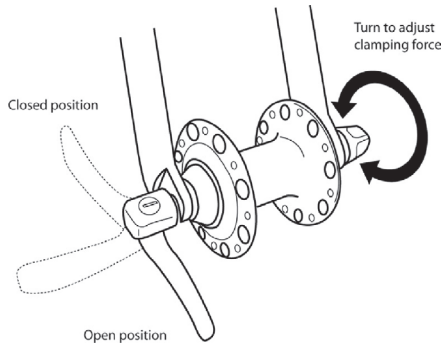


Figure 11

⚠ WARNING: You need to use the cam mechanism when clamping your wheel with a quick release to achieve proper binding force, by switching the lever from the opened to the closed position. If you hold the level with one hand and you screw the nut to clamp the wheel, it will never be safely tightened. Instead, you need to switch the lever from the opened to the closed position with a very significant restriction force. The nut helps you adjust the amplitude of that force by screwing or unscrewing it.

It is the power of the cam that maintains the wheel in place. It squeezes the wheel hub in between the fork arm ends or dropouts when switching the lever from the opened to the closed position. The tightening force depends on the torque applied on the adjusting nut. To increase the tightening force, you need to turn the adjusting nut clockwise while holding the lever with the other hand. To reduce it, turn the adjusting nut counterclockwise again holding the lever. Less than half a turn can make the difference between a safe and an unsafe tightening. Refer to figure 11.

Notice: The quick release mechanism is installed on the wheel hub by its manufacturer. Never remove the mechanism from the wheel hub unless you need to repair it. Consult your authorized Devinci dealer for the repair of a wheel hub.

B. Front wheel alternative devices

On many models, the front fork is equipped with an alternative retention device that prevents the wheel from disengaging in case of poor quick release installation. This device, integrated directly to the fork by the processes of machining or casting, shall not replace, under any circumstances, the prescribed adjustment of the quick release.

⚠ WARNING: It is very dangerous to use a bike with a modified or removed auxiliary retention device. The modification or the removal of this device could result in serious injury or even death. This could also lead to the annulment of your warranty.

C. Disassembly and assembly of a wheel equipped with a quick release

a. Front wheel disassembly

i. If your bike has v-brakes, spread the brake calipers as elaborated in section 7.3;
ii. Switch the quick release from the closed to the opened position;
iii. Loosen the adjusting nut of the quick release until the wheel can be adequately removed;
iv. Lift the front of the bike a few centimeters and hit the wheel downward with your hand to disengage it from the fork.

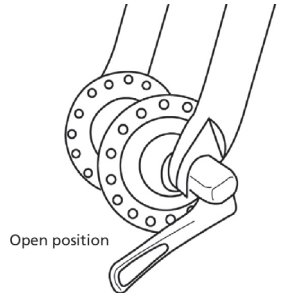


Figure 12

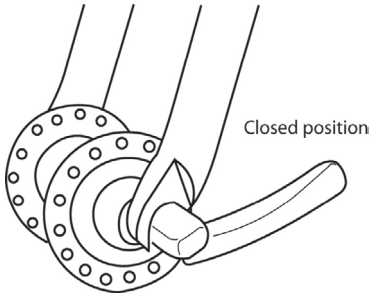


Figure 13

b. Front wheel assembly

Notice: If your bike has disc brakes, make sure you do not damage the disc, the calipers or the pads in the process of removing the front wheel. Be particularly careful when inserting the disc between the brake pads and the calipers.

i. Turn the quick release lever into the opened position as shown on figure 12;
ii. Place the fork straight with respect to the bike and insert the wheel between the fork dropouts. The axel must firmly rest in the dropouts;
iii. Maintain the quick release lever at the opened position with one of your hands. Manually tighten the quick release adjusting nut until you feel an adequate resistant torque;
iv. Press the wheel firmly into the dropouts, align the wheel with respect to the fork, align the quickrelease lever with the fork arm and then switch it to the closed position. Make sure the quick release lever ends up being parallel to the fork arm as shown on figure 13;

⚠ WARNING: In order to place the quick release lever into the closed position, you must use leverage with the fork arm. Also, the lever should leave a clear imprint in the palm of your hand for a few seconds. If this is not the case, place the lever back to the opened position and turn the adjusting nut a quarter of a turn clockwise and try again.

v. If you cannot tighten the quick release lever to the closed position, you need to loosen the adjusting nut a quarter of a turn. Then try again;

vi. Reconfigure the brakes back in place and make sure the wheel is properly centered, so that it turns freely without touching the brake pads.

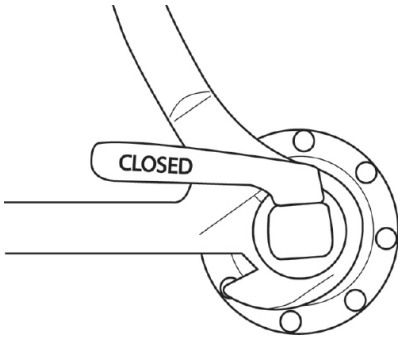


Figure 14

⚠ WARNING: The auxiliary retention system is not intended to replace adequate tightening of the quick release. If you use your bike and the quick releases are not tightened enough, you risk losing the wheels, damaging your bike and suffering serious injury or even death.

c. Rear wheel disassembly

i. Shift the rear derailleur onto the highest gear corresponding to the smallest sprocket;
ii. If your bike has v-brakes, spread the brake calipers as shown in section 7.3;
iii. Turn the quick release lever to the opened position as illustrated in figure 12;
iv. Lift the rear of the bike a few centimeters and push the wheel Lift the rear of the bike a few centimeters and push the wheel disengage it.

d. Rear wheel assembly

Notice: If your bike has disc brakes, make sure you do not damage the disc, the calipers or the pads in the process of replacing the front wheel. Be particularly careful when inserting the disc between the brake pads and the calipers.

i. Shift the rear derailleur on to the highest gear which corresponds to the smallest sprocket;
ii. Shift the rear derailleur on to the highest gear which corresponds to the smallest sprocket;
Turn the quick release lever to the opened position, referring to figure 12. Place the wheel with the quick release positioned on the rear derailleur's opposite side;
iii. Bring the derailleur body towards the back with one of your hands;
iv. Place the chain on the smallest sprocket of the cassette. Position the wheel axel in the dropouts and push vigorously as shown on figure 14;
v. Turn the adjusting nut clockwise until it touches the dropout. Turn the quick release lever towards the closed position, making sure the lever is parallel to the seat stay;

⚠ WARNING: The auxiliary retention system is not intended to replace adequate tightening of the quick release. If you use your bike, and the quick releases are not tightened enough, your wheels risk to disengaging, damaging your bike and leading to serious injury or even death.

vi. If you cannot tighten the quick release lever to the closed position, you need to loosen the adjusting nut a quarter of a turn. Then try again;

vii. Place the rear derailleur back in place;

viii. Reconfigure the brake back in place and make sure the wheel is properly centered so that it turns freely without rubbing the brake pads.

D. Assembly and disassembly of wheels without quick release

a. Front wheel disassembly

i. If your bike has v-brakes, spread the brake calipers as elaborated in section 7.3;

iii. Lift the front of the bike a few centimeters and hit the wheel downward with your hand to disengage it from the fork.

b. Front wheel assembly

i. Place the fork straight with respect to the bike and insert the wheel between the fork dropouts. The axel must firmly rest in the dropouts. The washers should be on the outside of the dropouts, before the nuts;
ii. Press the wheel firmly in the dropouts and align the wheel with respect to the fork. Tighten the nuts firmly on the axel with a 15mm wrench;

iii. Reconfigure the brake back in place and make sure the wheel is properly centered, so that it turns freely without touching the brake pads.

c. Rear wheel disassembly

i. Shift the rear derailleur to the highest gear which corresponds to the smallest sprocket;
ii. If your bike has v-brakes, spread the brake calipers as shown in section 7.3;
iii.With a 15mm wrench, loosen the axel nuts;
iv.Lift the rear of bike a few centimeters and push the wheel forward then downward to disengage it.

d. Rear wheel assembly

i. Shift the rear derailleur to the highest gear which correspond to the smallest sprocket;
ii. Bring the derailleur body towards the back with one of your hands;
iii.Place the chain on the smallest sprocket of the cassette. Position the wheel axel in the dropouts and push vigorously as shown on figure 14;
iv.Tighten the axel nuts firmly with a 15mm wrench;
v. Place the rear derailleur back in place;
vi.Reconfigure the brake back in place and make sure the wheel is properly centered, so that it turns freely without rubbing the brake pads.

7.2 Seatpost

Most bikes have a quick release to clamp the seatpost. These work exactly like the wheel quick releases as explained before. Even though it looks like a bolt with a nut and a lever, it is actually a cam mechanism that clamps your seatpost tightly and that facilitates adjusting its height.

⚠ WARNING: If you use your bike and its seatpost quick release is not tightened enough, your seat could move and turn. This could result in a loss of control, leading to serious injury or even death. It is, therefore, essential that you:

1. Ask your authorized Devinci dealer to explain how your quick release works so that you can safely adjust your seat;
2. Learn how to safely use a quick release so that you can apply this knowledge;
3. Make sure your seat is properly clamped before every ride.

A. Quick release adjustments

It is the power of the cam that maintains the seatpost in place. It squeezes it inside the seat tube when switching the lever from the opened to the closed position. The tightening force depends on the torque applied on the adjusting nut. To increase the tightening force, you need to turn the adjusting nut clockwise while holding the lever with the other hand. To reduce it, turn the adjusting nut counterclockwise while hold ing the lever. Less than half a turn can make the difference between a safe and an unsafe clamping.

⚠ WARNING: You need to use the cam mechanism when clamping your seatpost with a quick release to achieve proper clamping force, by switching the lever from the opened to the closed position. If you hold the nut in one hand and you turn the lever to tighten the wheel, the seatpost is never going to be safely clamped. Instead, you need to switch the lever from the opened to the closed position with significant restriction force. The nut helps you adjust the amplitude of that force by screwing or unscrewing it.

⚠ WARNING: To place the quick release lever into the closed position, you must use leverage with the seat tube. Also, the lever should leave a clear imprint in the palm of your hand for a few seconds. If this not the case, place the lever back to the opened position and turn the adjusting nut a quarter of a turn clockwise and try again.

7.3 Brakes

Notice: In order to achieve the optimal braking power, use both front and rear brakes simultaneously.

⚠ WARNING: If you brake suddenly and excessively, you risk falling over your bike and that could cause serious injury or even death.

7.3.1 Brake functioning

First of all, for safety purposes, it is essential you instinctively associate each brake lever with the brake it controls. In North America, the right lever controls the rear brake while the left one controls the front one. On a bicycle, it is the friction between the brake pads and the rims that allows braking, by transforming kinetic energy into heat. There are also disc brakes that uses the same principle but with a disc instead of the wheel rim. In both cases, for the best braking, clean the brake pads and the rim or the disc and make sure there are no traces of lubricant or wax.

Furthermore, you should check that the brakes are easy to reach with your hands. If you feel your hands are too small, that the position is uncomfortable or if you are unable to brake with full power, ask your authorized Devinci dealer. Most of the time, they will be able to tune the reach of the brake levers or install specific grips to solve the problem.

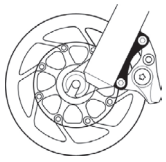


Figure 15

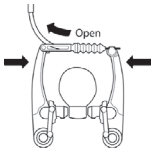


Figure 16

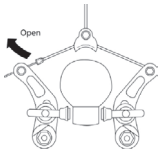


Figure 17

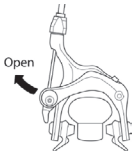


Figure 18

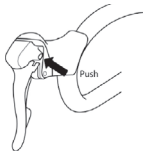


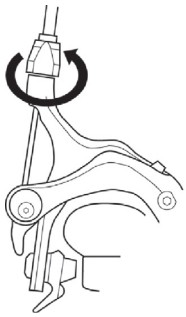
Figure 19

Most brakes possess a mechanism that allows disengaging the brake from the rim when you want to assemble or remove the wheel. Once disengaged, it is impossible to brake. Ask your authorized Devinci dealer to explain clearly how to disengage the brakes on your bike according to the mechanism you have (refer to figures 15 to 19). Always check that your brakes are operational before using your bike. Brakes are not intended for the sole purpose of stopping your bike, they are also intended to help you slow down. The maximal stopping power can be achieved just before the wheel starts skidding. When the wheels are locked up, a large amount of the breaking power is lost and you tend to loose control. You must learn to slow down and brake efficiently without locking up your wheels. This technique is known as progressive braking modulation. Pull the brake lever by progressively increasing the braking power instead of pulling suddenly and excessively. If you feel your wheels starting to lock, smoothly release the lever until you get a normal wheel rotation back. It is very important to adjust the braking force on the wheels according to the surface on which you're riding. To thoroughly understand this technique, we recommend you try walking beside your bike to visualize the effect of pulling the brake levers. You are likely to perceive more easily the moment your wheels lock up and stop rotating.

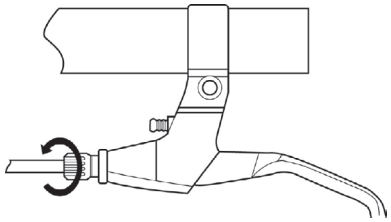
⚠ WARNING: The disc and linear pull brakes on certain models are extremely powerful. If you have this kind of brakes, familiarize yourself carefully by trying to brake progressively at first. Pull the lever too suddenly could result in loss of control and a fall.

⚠ CAUTION: Disc brakes become very hot after intensive or prolonged use. Be careful not to burn yourself by touching the disc or the caliper.

When braking, the bike starts slowing down, but your body inertia tends to continue forward at the same pace, causing a weight transfer towards the front wheel. If you brake by suddenly locking up the wheels, this weight transfer could throw you over the handlebars. This phenomenon will even be accentuated if you have a front suspension. Indeed, the suspension will compress downward, increasing the weight transfer.



Caliper brake adjusting barrel
Figure 20



Brake lever adjusting barrel
Figure 21

Another factor that affects the braking force is the load on your wheel. Indeed, normal force is directly proportional to the friction force you can reach. As a matter of fact, a wheel with a heavy load on it will allow a higher braking force, while a wheel with a lighter load on it will lock up much sooner. Therefore, you should back up to the rear of your bike when braking with more intensity. This will increase the weight on the rear wheel while decreasing the weight on the front one, it will also shift your center of gravity. This will help reduce the risk on being thrown over your bike. Simultaneously , you should use the front brake with more strength than the rear one. This technique is even more important when riding down steep terrain.

In order to master braking techniques, it is important to practice in a safe place away from traffic, obstacles or any other danger. Make sure you master the lock up limits of your wheels and the weight transfer linked to emergency braking.

When riding your bike on wet surfaces, in rainy weather or on light and running soil, your bike response changes. The tire adherence decreases quickly and your maneuverability is negatively affected. Often, a smaller braking pressure is all it takes to lock up the wheels completely. Furthermore, water and humidity make the brake pads less efficient. In wet weather, make sure you reduce your speed in order to better control your bike.

7.3.2 Brake tuning

If your bike is equipped with hydraulic disc brakes and you suspect something abnormal at your safety mechanical inspection, have it immediately checked by your authorized Devinci dealer.

On the other hand, if your bike is equipped with cable brakes and it fails the safety mechanical inspection, you can try adjusting their strokes by turning their tuning barrel counter-clockwise. Make sure you screw back the lock nut after the adjustment. If the problem persists, ask your authorized Devinci dealer for assistance. Refer to figures 20 and 21 for visual support.

7.4 Drive train

Your bike is equipped with a mechanism of chain and sprockets, also known as a drive train that allows changing the pedaling ratios and optimizes your pedalling power.

Shifting gears will allow you to increase your physical benefits. Using your gears, you can pedal with a higher cadency and a lower resistance, which will help improve your endurance and power. On the other hand, exerting huge forces on your pedals with a low cadency will obtain poor results for your health and your fitness. The numerous gears your bike possesses help you target the optimal cadency in a variety of situations and geographical conditions. The optimal cadency is generally ranged between 60 and 90 turns per minute, depending on your age and your fitness.

7.4.1 Drive train functioning

The drive train mechanism of your bike is divided into:

- A rear derailleur;
- A front derailleur (most of the time);
- A freewheel cassette;
- One to three chainrings;
- A chain;
- One or two shifters.

To calculate the number of speeds available on a bike, just multiply the number of chainrings with the number of rear sprockets on your freewheel cassette. For example, a bike with three chainrings and nine sprockets on your freewheel cassette has twenty-seven speeds.

A. Shifting gears

Many shifter models are available on the market. Devinci has selected shifters to better meet your criteria in terms of ergonomics, performance and price. The figures 22 to 25 illustrate the way the different models work. Check the type of shifters your bike is equipped with before continuing.

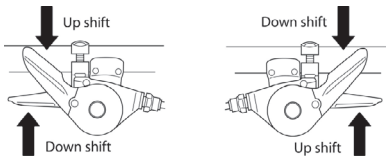


Figure 22

Figure 23

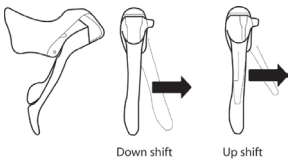


Figure 24

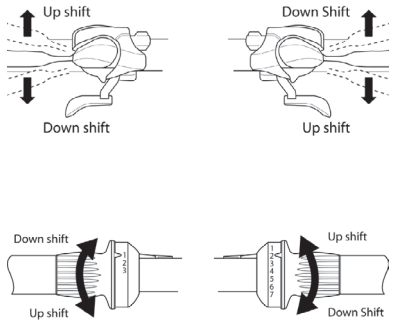


Figure 25

The vocabulary for gear shifting might seem a bit confusing at first. To go to a shorter gear ratio or to a slower gear is designated as a downshift while upshifting refers to the action of going at a longer gear ratio or a faster gear. A slower gear requires less strength than a faster gear. To make that even more complex, the actions on your rear derailleur are opposite to those on your front derailleur. Indeed, the action of down shifting can be achieved in two different ways; lowering the chain on a smaller chainring or raising the chain on a larger sprocket on the freewheel cassette. Refer to sections B and C for more details.

A little trick to help you memorize this is to note that the chain must be closer to the frame in order to down shift and climb a hill or further away to upshift and go faster.

To shift gears, the chain must be tight and rotate in the normal direction. The derailleur works only when pedaling forward.

⚠ CAUTION: Never activate your shifters when pedaling backwards and never pedal backwards after having shifted gears. The gears could jam and damage your bike.

⚠ WARNING: Never send the chain on the larger or the smaller sprocket of the freewheel cassette if your derailleur is not properly adjusted. The chain could jam and result in a fall and serious injury. This also applies to the front derailleur.

B. Front derailleur shifting

It is the left shifter that activates the front derailleur. The chain move from the smaller chainring for easier pedaling (slower gears) to larger ones for harder pedaling (faster gears).

C. Rear derailleur shifting

It is the right shifter that controls the rear derailleur, making the chain moves on the different sprockets of the freewheel cassette. The larger sprockets produce smaller ratios, which necessitate less effort, but require more pedaling cycles to achieve a given distance. The smaller sprockets produce greater ratios, which require more effort but necessitate fewer cycles to achieve the same given distance. When downshifting, you displace the chain from a smaller sprocket to a larger one and upshifting is the other way around.

D. Choosing the proper gears

When climbing a hill, choose slower gears that are a combination of the smallest chainring with larger rear sprockets. On the other hand, to increase your speed, combine the largest chainring with the smallest rear sprockets. Refer to figure 26 for visual support.

At first, choose a combination of gears that is convenient for you. You should target a gear ratio that allows a decent acceleration without requiring destabilizing effort. Practice gear shifting in a safe place. You should familiarize ytourself with the different possible combinations. Once you will have understood these basic principles, you should be ready to shift gears smoothly while riding.

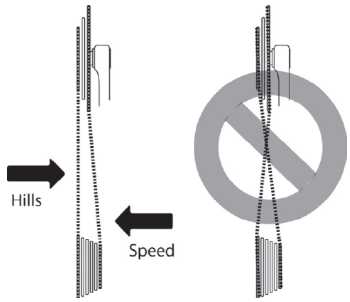


Figure 26

7.5 Tires and inner tubes

7.5.1 Tires

Many tire models are available on the market. There are generic tires for versatility and specific ones that are adapted to particular weather or soil. Devinci has carefully selected tires offering a great quality-to-price ratio to satisfy your specific needs, depending on the biking you do. After a bit of experience, you might want to change your tire types. You could then ask your authorized Devinci dealer for advice.

Your tire size, the recommended pressure and sometimes details concerning the targeted applications are written on the tire sidewall. The most important information concerns the pressure (refer to figure 27).

⚠ WARNING: Never exceed your tire's recommended pressure, indicated on its side. Exceeding it can result in your tire bursting or going off the rim. This could cause damage to your bike, injury or even death.

The optimal way to inflate a tire is to use a manual pump specially designed for bicycles. Ask your authorized Devinci dealer to assist you in the process of choosing a good pump.

⚠ CAUTION: Inflating compressor units in gas stations have very high airflows that quickly increase the pressure in your tires. When using these kinds of units, inflate your tire carefully with quick bursts to prevent it from being damaged.

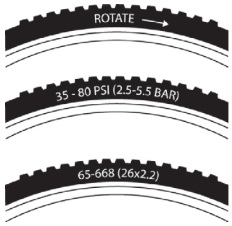


Figure 27

As mentioned earlier, your tire sidewall indicates an interval of recommended tire pressure. The maneuverability of your bike on different soils largely depends on your tire pressure.

When inflated to the maximal pressure, your tire offers less resistance and friction. However, this damps impacts. Maximum pressure is recommended on a dry and smooth surface. At the minimum pressure, tires offer better results on smooth or slippery surfaces like compact argyle or light and running soil.

If your tire pressure is insufficient for your weight or riding style, the tire could deform and pinch the inner tube which could result in a tire puncture.

⚠ WARNING: The pressure readings from gas station compressor units are often inaccurate and so are many automotive tire gages. Do not rely on these devices, unless you are confident of their precision. Make sure you always use a quality manometer that provides good and accurate results.

Refer to your authorized Devinci dealer to learn about the tire pressure you should have, according to your riding habits, and inflate your tires accordingly. To check, refer to section 5.4.2. You will then have a visual benchmark to refer to when inspecting your tire pressure. Make sure you check it frequently since it can change quickly.

Some high-end tires have specific direction of rotation. Indeed, their tread is designed to provide a better adherence in a specific direction. In that case, an arrow on the sidewall indicates the proper direction. Make sure the wheels are properly mounted to respect the rotating direction as you go forward.

7.5.2 Valves

Valves allow inflating your tires' inner tubes and keeping their pressure at the same time. Two valve models are available on the market; the Presta and the Schraeder shown on figures 28 and 29. You need a pump that is compatible with the valve model that your tires are equipped with. Adaptors exist to make the Presta valves fit the Schraeder standard.

The Schraeder valve is the same used by the automotive industry. To inflate a Schraeder valve tube, all you need to do is to unscrew its cap and use a bicycle pump or a compressor. To deflate it partially or completely, just press on the tiny pin in the middle of the valve end with a sharp-pointed object. Always have the valve caps properly hand-tightened before using your bike.

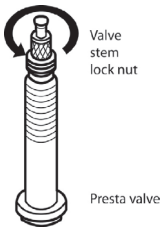


Figure 28

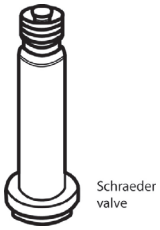


Figure 29

The Presta valve has a smaller diameter than the Schraeder and can only be found on bicycle tires. To inflate a Presta valve tube, you need a pump equipped with a Presta head. Remove the cap, unscrew its small retaining nut and press down the small pin to set it free. Insert your pump head on the valve end and just inflate the tube. However, if you wish to inflate a tube using a compressor, you are going to need a Presta adaptor. Ask your authorized Devinci dealer for one. The adaptor can be screwed on the valve end once the small retaining nut is loosened. To diminish the pressure inside your Presta valve tube, unscrew the retaining nut and press it down until you have reached the desired pressure. Tighten the retaining nut and place your cap back before using your bike.

7.6 Toe-clips

Toe-clips are intended to help cyclists maintain their feet in place on their pedals. Furthermore, the toe-clip allows you to adequately position your foot on the pedal, providing the best pedaling power Cyclists can tighten the straps to maintain their feet on the pedals during the whole pedaling cycle. The main advantage of this mechanism is to allow the use of any kind of shoes, even though results are optimal with adapted shoes. Ask your authorized Devinci dealer for more details.

⚠ WARNING: You need to have specific skills to get on and off a bike that has toe-clips. These skills are earned through practice. Before becoming a reflex, this technique is likely to require all your concentration. Practice using the toe-clips in a safe place where there is no traffic, obstacles or any other risk. Make sure you learn to use them with loose pedal straps and do not tighten them before mastering the technique. Never ride in traffic with tightened straps.

7.7 Clipless pedals

The clipless pedals are used by most experienced cyclists and competitive riders. The pedals offer the advantage of maintaining the feet in the optimal pedaling positioning. Their behavior is similar to those of alpine ski bindings. A rigid plate on the shoe sole gets clamped into the binding. Clipless pedals require specific shoes adapted to the brand and model.

Most models allow for adjusting the clamping and the retaining forces required to operate the pedals. Your authorized Devinci dealer can show you how to do it. Use small clamping forces until you are familiar with the engaging and disengaging techniques.

⚠ WARNING: The clipless pedals bind your foot to the pedal. You need a certain amount of experience to engage and disengage your feet safely from the pedals. Before it becomes a reflex, experience to engage and disengage your feet safely from the pedals. Before it becomes a reflex, this technique is likely to require all your concentration. Practice using clipless pedals in a safe place where there is no traffic, obstacles or any other risk. Carefully follow the instructions provided with your pedals and seek advice, if necessary, from your authorized Devinci dealer.

7.8 Suspension

All all-terrain bikes have suspension systems. These are designed to help absorb the shocks and impacts encountered while riding off-road. There are many suspension models on the market and to elaborate on each of them would be futile and too exhaustive for this manual. If your bike is equipped with a suspension system, refer to your authorized Devinci dealer for details regarding its maintenance and tuning.

A suspension improves the comfort, stability and maneuverability of your bike. This helps you ride faster on the mountain biking trails. But do not rely only on your bike's superior ability to attack difficult courses. Make sure you also know your own limits. You need to spend lots of time and sweat to increase your riding skills.

⚠ WARNING: If your suspension is maladjusted or poorly maintained, it could malfunction and that could result in a loss of control and a fall.

⚠ CAUTION: By adjusting a suspension, you risk affecting your bike braking and handling capacities. Never try to adjust suspension settings without having previously studied the manufacturer's instructions and recommendations. Test your new setting carefully by doing a short ride in safe spot.

⚠ CAUTION: Your bike is not meant to be equipped with any suspension models. You should check with your authorized Devinci dealer which suspension systems are compatible.

⚠ WARNING: When equipped with a suspension, your bike is likely to become more dangerous at high speeds. Indeed, braking makes the front suspension compress and that could result in loss of control and a fall. You should learn to master the behavior of your suspension before try ing to ride on steep terrain and/or at high speeds.

7.9 Component upgrades

There are tons of components out there that are meant to improve your bike's performance, comfort or look. Consult your authorized Devinci dealer in order to receive assistance when choosing new parts.

⚠ WARNING: A bad installation or use of a replacement part could damage your bike and result in loss of control that could cause serious injury or even death.

7.9.1 Comfort improvement

As soon as your bike is well set-up (seat height, positioning and tilt or handlebar adjustments), you can look at some others things that can raise your comfort.

A. Seat

The comfort of a seat is more linked to your morphology than to the thickness of its padding. Devinci has chosen seats that are adequate for most cyclists in your category. However, the seat could be incompatible with your body and feel quite uncomfortable. Your authorized Devinci dealer has many seat models that are likely to suit your needs. If you don't like your seat, consult your authorized Devinci dealer for helping finding better-adapted models.

B. Cycling gloves

If you plan to ride for more than one hour, you should equip yourself with cycling gloves. Their padded palms help prevent the hand numbness caused by the handlebars' vibrations. This feeling, known as carpal tunnel syndrome, can become painful after awhile. Moreover, the gloves will protect you from scratches in case of a fall.

C. Sportswear

In order to improve your comfort and performance, cycling shorts and jerseys are very important accessories. Two types of cycling shorts are available on the market, the loose-fit model and the tight-fit model in Lycra. These are meant to reduce friction and the wear it tends to cause. Make sure you wear them without underpants for optimal comfort as well as to avoid fabric rubbing. Cycling clothes are equipped with back pockets that can carry small objects without having them wobbling as you pedal. Most jerseys are made from special fabrics which elp the evacuation of the heat and perspiration and which improve comfort.

D. Hydratation

During any physical activity, your body needs to stay hydrated and you should therefore drink a lot of water. The best and simple solution is still the water bottle. When your bike model allows it, it is strongly recommended that you install a bottle holder where it belongs.

7.9.2 Achieving higher performance by upgrading

Most people who want to improve their bike performance start with the drive train and braking component upgrades. But before modifying your bike, you should have your authorized Devinci dealer confirm that the new parts are compatible.

⚠ CAUTION: Your bike warranty may be void after component upgrades. Check with your authorized Devinci dealer that your warranty covers changing parts and components of your bike.

Another way to improve your bike's performance is to upgrade your actual parts (handlebars, stem, wheels, tires, etc.) with lighter ones. You should however remember that lighter parts usually imply a shorter life cycle. Consequently, have frequent inspections to check the condition of the upgraded components.

Important upgrades are the replacement of the front and rear suspension of all-terrain bikes. Before installing a different fork on your bike, have your authorized Devinci dealer check if the frame is designed to accept such changes and the stress associated with them.

⚠ WARNING: Suspension forks, especially double-crown models cherished by downhill riders, tend to induce enormous stresses in the steer tube and front triangle areas. A few bike models are not designed to accept such loads, and sudden frame failure could result, leading to serious injury or even death.

Many all-terrain and hybrid bikes are now equipped with disc brakes. In case your bike has none and you wish to install them, it is recommended you first ask your authorized Devinci dealer to find out if your bike is compatible with disc brakes. Most front suspensions are designed to accept the heavier loads linked to the anchoring points of the disc brake. However, your frame stays might not be intended for such high braking torques. Before installing disc brakes on the rear of your bike, ask your authorized Devinci dealer if your frame can take the increase in stress that comes with it.

⚠ WARNING: Disc brakes induce very high levels of stress in the stays of your bike. If your frame is not designed to tolerate such stresses, it could suddenly fail and cause serious injury or even death.

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08 MAINTENANCE AND REPAIR

Notice: New technologies now allow the modern bike to become highly efficient but very complex at the same time. This complexity, along with a high number of recent innovations, make it impossible for us to provide you with all the necessary information you would need to maintain and repair your bike. In order to minimize the risk of accidents and injuries, we strongly recommend you bring your bike to your authorized Devinci dealer for maintenance and service.

Your authorized Devinci dealer is certainly the best resource to get your bike tuned-up or fixed. Indeed, the maintenance that you can perform yourself depends largely on your skills, your experience and the tools you have at your disposal.

The maintenance required for your bike is determined by many factors, ranging from your cycling style to your geographical location. Consult your authorized Devinci dealer to identify your maintenance needs.

⚠ WARNING: Many situations you may encounter require very specific knowledge and tools. Do not attempt to tune or fix your bike if you doubt in any way your ability to finish it. Any error could lead to bike damage and serious injury or even death.

If you wish to learn to repair your bike by yourself, three possibilities lay ahead of you:

1. Ask your authorized Devinci dealer to suggest books that cover bike repair and maintenance;
2. Ask your authorized Devinci dealer to provide you with the manuals of installation and maintenance of the various components your bike is equipped with;
3. Ask your authorized Devinci dealer to inform you concerning bike mechanics classes and training near you.

No matter what your choice ends up being, we advise you to ask your authorized Devinci dealer to in spect the quality of your work before using your bike. This precaution is meant to ensure that everything is correct and properly functioning. Since this check-up is time-consuming, it is likely that your authorized Devinci dealer will charge a small monetary compensation.

8.1 Maintenance Schedule

Some maintenance operations as well as some repairs have to be executed by the owner of the bicycle and do not require any particular tools or specific skills.Here is the list of the maintenance operations and repairs that you should do yourself. Any other repairs or maintenance have to be done in a proper local with a certified mechanic with the necessary tools at their disposal.

8.1.1 Breaking-in period

The durability of your bike as well as its functioning will be improved if you take the time to do a break-in phase before putting it under severe stress. The shifters, the brake cables and the spokes are likely to elongate or contract during the first rides. You might also need to get them adjusted after a few runs. When doing your safety mechanical inspection from section 5.4, you could find out that a few elements need to be readjusted. However, even if every element seems in order, it is preferable to bring the bike need to be readjusted. However, even if every element seems in order, it is preferable to bring the bike back to your authorized Devinci dealer for a check-up. Usually, the authorized Devinci dealer advises bringing your bike back to them after 30 days or after riding 5 hours on all-terrain or 15 hours on road, whichever comes first. They will then proceed to the first maintenance. Nevertheless, if you noticed any anomalies before this, you would need to bring your bike to your authorized Devinci dealer before using it again.

8.1.2 Before every use

Proceed through the safety mechanical inspection as shown in section 5.4.

8.1.3 After every long or intense ride

If your bike goes through water, mud and dust, or after many kilometers traveled, you should clean up your bike carefully. Lubricate the chain, the front and the rear derailleur, the cassette and the chainrings without getting the brakes, the discs, the wheels and the rims exposed. Sweep lubricant excess. Refer to your authorized Devinci dealer to learn what lubricant to use and when to do it, depending on your geographical location.

8.1.4 After every long or intense ride or after 10 to 20 hours of use

- Block your front wheel firmly with your brake and swing the bike back and forth to get a feeling for different articulations. If you hear a cracking noise or if you feel something loose, then the stem could have loosened. Have your authorized Devinci dealer run a check-up;
- Lift the front wheel and turn it from side to side. Does it feel smooth or hard? If you feel too much restriction, your stem could be excessively tightened. Have your authorized Devinci dealer run a check-up;
- Take a pedal and pull and push several times. Repeat with the other pedal. Do they feel loose? If they do, have your authorized Devinci dealer run a check-up;
- Check your brake pads, are they worn or not positioned properly on the rim? If so, have your authorized Devinci dealer run a check-up;
- Make sure your cables and sheaths are in order. Can you see rust, strain or wear on the cables? If so, have your authorized Devinci dealer run a check-up;
- Press each pair of spokes that are facing each other between your thumb and your forefinger. Are they tightened enough? If not, have your authorized Devinci dealer run a check-up;
- Run a complete inspection of your frame by looking for cracks, deep scratches or discoloration. Carefully check the welds, the junctions of the tubes, the head tube area and the bottom bracket area. If you find something suspicious, have your authorized Devinci dealer run a check-up;
- Check that every component and accessory is securely attached and that there's no looseness. Tighten them back if necessary or ask your authorized Devinci dealer for assistance.

⚠ WARNING: A bike and its components sustain the hight levels of reoetitive stresses. The fatigue endurance depends largely on the nature of the materials and their micrographic structures. If you use a component longer than its standard fatigue like, id risks cracking and then suddenly breaking, causing serious injury or even death. The apparance of cracks, scratches or discolorations are clues that your bike is fatigued and worn. If you find any of these, immediately ask your authorized Devinci dealer to evaluate the components and replace them if necessary.

8.1.5 Braking and shifting issues

If you find a problem with your brakes when doing your safety mechanical inspection, try adjusting their strokes by turning their tuning barrel. Make sure you lock it back screwing its lock nut. If the problem persists, ask your authorized Devinci dealer for assistance.

If you find a shifting problem when doing your safety mechanical inspection, the derailleur is probably maladjusted. The problem may come from a simple elongation of your shifter cable. Turn the shifter's tuning barrel counterclockwise a quarter of a turn and lock it back with its lock nut. If the problem persists, ask your authorized Devinci dealer for assistance.

8.1.6 After riding 25 off-road hours or 50 road hours

Bring your bike to your authorized Devinci dealer for a complete check-up.

8.2 Emergency repair

If you ride your bike near your home and a mechanical failure occurs, you could still get back on foot or call a friend to pick you up. However, the situation is not the same if you're on a long ride. Here's why it is essential you bring the following equipment in case of emergency:

- Allen keys (4mm, 5mm and 6mm) to tighten your bike screws;
- A small tire pump or an inflating cartridge compatible with your valve;
- Spare tire tube;
- Tire removing tool;
- Your identity cards;
- Cash to quench your thirst, buy foods or use a phone.

8.2.1 Flat tire

Remove the wheel as shown in section 7.1.1. Press the valve to empty the inner tube completely, referring to section 7.5.2. Start removing the tire from the rim, on the end opposite to the valve. To do so, press simultaneously on the tire from the interior of the rim and lift the tire by sliding it on the rim or use a tire removing tool to gently lift the edge of the tire over the rim. Remove the valve lock nut and push the valve through the rim. You can now remove the inner tube.

Inspect the tire carefully to identify and remove, if possible, the object that caused the flat. If the tire is cut, try covering the damaged area to prevent pinching the inner tube. Use tape, a spare patch, a piece of the old inner tube, a piece of paper or anything similar that could temporarily do.

Install a patch on the inner tube as shown in the patch installation manual or even better, change the inner tube for a new one.

⚠ WARNING: The installation of a patch on your tire's inner tube is an emergency and temporary repair. The use of a patch may weaken the tire considerably and cause a puncture that could result in loss of control and a fall. Replace the partched tube with a new one as soon as possible.

Place the inner tube inside the tire and place the tube valve in the rim hole. Do not tighten the nut yet. Inflate the tube slightly and insert the tire on the rim with your thumbs, starting at the valve. Avoid pinching the tube between the rim and the tire. If you are not able to insert the last few centimeters of tire, use a tire removing tool very carefully, trying not to pinch the tube.

⚠ WARNING: You risk piercing the tube if you try installing your tire with a screwdriver or any other tool not intended for this use.

Check with your hands that the tire is properly centered with respect to the rim and that the tube is well-positioned. Inflate the tube to the recommended pressure by referring to section 5.4.2. Tighten the valve lock nut with your hands and install your wheel back on your bike.

⚠ WARNING: Never ride with a flat or deflated tire. You risk damaging the tire, the wheel and the bike, and could also lose control and fall.

8.2.2 Broken spoke

When one of your wheel's spokes becomes broken or loosened, your wheel is weakened. If you break a spoke during a ride, get back to your starting point really slowly and safely since you risk breaking others and irreversibly damaging the wheel.

⚠ WARNING: A broken spoke weakens the wheel considerably. This could make it wobble and rub against the brake pads or the frame. You would therefore risk losing control and falling.

When you have a broken spoke, twist it around its closest neighbor in order to avoid jamming between the wheel and the frame. Lift the wheel and turn it to make sure it turns safely and that the wheel does not touch the brake pads. If the wheel touches the brake pads, then you need to walk your bike to your starting point. It is very dangerous to ride with a wobbling wheel that has a broken spoke. Have your authorized Devinci dealer repair or change your wheel as soon as possible.

8.2.3 Accident or major impact

First make sure you are not seriously hurt.

⚠ WARNING: An accident may prematurely wear the different parts of your bike, therefore causing unexpected failures that could cause injury or even death.

After an accident, inspect your bike carefully and repair everything that you can. Do not hesitate to contact your authorized Devinci dealer for assistance in the process. Once back at your starting point, proceed to the detailed mechanical check-up described in section 5.4 in order to identify every damaged part. Replace every part which has been bended, deeply scratched or discolored.

⚠ CAUTION: Bring your bike to your authorized Devinci dealer after an accident or a serious fall for a complete inspection.

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09 CARBON FIBER BICYCLES

Carbon fi ber has been put to the test in recent years and has yielded excellent results. It has very different properties than aluminum. Unlike aluminum, carbon fi ber is not subject to fatigue, does not deform, does not bend or dent: it breaks. Damaged carbon fi ber components may not appear compromised or dangerous but can be subject to sudden failure as result of impact, and may do so without warning. DEVINCI would like you to enjoy safe rides. If you crash or your bicycle has sufered a major impact, have an authorized DEVINCI dealer inspect your bicycle.

⚠ WARNING : A damaged carbon fi ber frame may fail under impact and cause an accident leading to serious injury or even death. A crash or impact may result in damaged carbon fiber. If you suspect damage to your carbon fi ber frame or components due to crash or impact, bring your bicycle immediately to an authorized DEVINCI dealer for inspection. DO NOT CONTINUE TO RIDE!

10.1 Inspection

Inspect regularly your frame and components using your eyes, ears and hands. If you suspect an anormaly, cease riding immediately and bring it to an authorized DEVINCI dealer for inspection.

10.1.1 Visual

Visually inspect your carbon fi ber frame and components. Checks for deep scratches, cracks, bumps or any other surface damage.

10.1.2 Touch

Be attentive to any change in perfomance or comfort during riding. Abnormal vibration, sudden loss of braking power or pedaling resistance can be signs of a problem.

10.1.3 Auditory

Be attentive to any abnormal noise. Cracking, grinding or any other abnormal noise may be indicative of a problem.

10.2 Maintenance

Carbon fiber requires more careful and frequent maintenance than other materials. Devinci recommands to:

- Clean your carbon fi ber components after each use to remove any abrasive elements such as sand, small pebbles, tar or any other road contaminants;
- Use a clean 100% cotton rag. Be sure that no abrasives stay stuck to the rag you are using to wipe the carbon fiber;
- Use a mild non-abrasive detergent;
- Do not use a high pressure water jet directly on your carbon fiber.

⚠WARNING : Improper maintenance or negligence could lead to damage. A damaged carbon fiber component may fail under impact and cause an accident leading to serious injury or even death. Improper maintenance could void your warranty.

10.3 Proper use

Carbon fiber deforms very little and does not compress, hence it is very important how you place a carbon fiber bicycle on a repair stand, on a car rack, in a bicycle travel case or just simply in storage.

10.3.1 Bicycle racks

The only bicycle racks authorized by DEVINCI are thoses that do not come into direct contact with any carbon fiber. Conventional trailer hitch racks and vertical frame type supports are not recommended.

Trailer hitch rack

vertical frame support

Wheel clamp trailer hitch rack

Fork mount roof rack

10.3.2 Repair stands

Nerver place a bicycle on a repair stand where the jaws clamp on the carbon fi ber frame or seat post. Doing so could permanently damage the carbon fi ber tubes. Substitute an aluminum seat post or use our DEVINCI adaptor for aero seat post (MASA08001).

Top tube clamp

Seat tube clamp

Aluminum seat post clamp

DEVINCI adaptator for aero seat post

10.3.3 Bicycle travel case

If your bicycle travel case requires that you remove the wheels, it is imperative that you place spacers between the rear drop outs and the front fork drop outs to prevent misalignment of your frame. Make sure that no loose items in your travel case come into direct contact with your carbon fi ber frame or components.

Fork spacer

Rear drop outs spacer

10.3.4 Storage

It is important to store your carbon fi ber frame following these guidelines:

- Always clean and maintain your bicycle before storing;
- Always store your bicycle in the following environment: indoors, a dry place, away from sunlight and damaging UV rays, away from dust, above freezing;
- Store your bicycle in a normal upright and vertical position and do not place any load on it;
- Be sure that nothing rubs up against the frame or is leaning against it.

⚠WARNING : Improper use of carbon fi ber frame and components can lead to damage. A damaged carbon fiber frame may fail under impact and cause an accident leading to serious injury or even death. Improper use of carbon fiber components can void the warranty.

10.4 Frame replacement policy

DEVINCI off ers the fi rst owner of a carbon fi ber DEVINCI frame a replacement price for any accidental damage incurred to the frame. Consult your local DEVINCI retailer for more information on our crash replacement policy.

DEVINCI'S RIDE IN PEACE WARRANTY

WARRANTY PERIOD FROM DEVINCI CYCLES INC.

The frames of cycles devinci inc,. 1555 Manic, Chicoutimi, Québec, Canada ('Devinci') are guaranteed against all manufacturing defects, for the periods specified below, as of the date of the initial purchase. During there specific periods, Devinci will replace or repair without charge, and at its discretion, the Devinci frames that display a manufacturing defect. The parts replaced or repaired in according with this warranty will be covered for a period equal to the remaining portion of the warranty of the original equipment. All frames are quaranteed for life. Paint and decals placed under Devinci clear coat on all frame models : 1 year.

The pivot * for full susension frames : 1 year

The components assembled on Devinci frames are guaranteed by their respective manufacturers. Please contact your authorized Devinci retailer for more information regarding the applicable warranty.

*The pivots include the bearings, bolts and axles holding together the elements of the suspension of the rear triangle.

WARRANTY EXCLUSIONS

Each Devinci bicycle was conceived for a specific use. The operational life of a bicycle varies according to its construction, maintenance and the care provided. Intensive use, use with a heavy load, use during competitions or for activities other than those for which the bicycle was conceived decreases largely its operational life. Any of these conditions may lead to a random failure. Abusive use will therefore cancel the warranty. Vinyl decals placed over the Devinci clear coat are not covered by warranty.

THIS WARRANTY DOES NOT COVER:

•Regular maintenance (Cleaning, Lubrification or inspection);
•Transport or shipping charges incurred as a result of the execution of the warranty;
•Cost of labour related to the assembly, disassembly, repair of replacement parts;
•Damages caused by normal wear and tear including damages caused by material fatigue;.

THIS WARRANTY DOES NOT APPLY IF:

•The damages were caused by a fortuitous event;
•The bicycle was purchased from a retailer other than those authorized by Devinci;
•The bicycle was not entirely assembled by an authorized Devinci retailer;
•The bicycle was repaired by a person other than an authorized Devinci retailer;
•You are not the original owner of the bicycle;
•The instructions contained in the user's manual for all frames and the technical manual for frames with full suspension were not respected;
•The periodic inspection recommended in the user's manual for all frames was not carried out;
•Parts not supplied by Devinci with the cicycle or not indicated in the user's manual for all frames or the technical manual for the frames with full suspension were used;
•The bicycle was used for an activity other than those for which it was conceived;
•The bicycle and/or its components were subject to abusive use, negligence, abnormal and/or excessive use or was implicated in an accident;
•The frame is too small for you;
•You used another seatpost than the one sold with your bike;
•The frame and/or its components were modified (ex: polishing, structural or mechanical modification or addition, tripping, sanding, strain hardening, shot peening);
•You continued to use your bicycle while it was damaged.

EXCHANGE POLICY IN CASE OF ACCIDENT

Devinci is aware that the purchase of a high performance bicycle is done with the heart. This is why our customer service applies an exchange policy at a low price to accommodate claims that would have been refused for one of the reasons mentioned in the section 'warranty exclusions'. This policy applies only to the initial buyer. Please contact your Devinci retailer for more information.

Limitation of liability: This is an integral warranty, complete and final, for Devinci frames. Devinci does not give authorization to any other person, including the authorized Devinci retaillers, to assume or grant, expressly or implicity, any or other person(s) and any demonstration or illustration of Devinci frames is in no way linked to Devinci and is furthermore excluded from this warranty.

Devinci assumes no liability in case of any property damage, moral or bodily injury to the user, the buyer or any other person(s), resulting from the use of a Devinci frame or one of its components.

Except as limited or expressly forbidden by law, regarding any other condition or guarantee, express or implied, based in law, established commercial customs and usage, including but not limited to, guarantee of merchantability or adaptation to a specific end, Devinci declines any responsability for any amount exceeding the actual purchase price or the bicycle nor for any particular, accessory or consecutive damages that may occur in connection with said bicycle.

With regard to the exercising of rights resulting from the present warranty, the buyer of a devinci frame agrees to elect domicile in the judicial district of chicoutimi, in the province of Québec, Canada, as an appropriate place for the hearing of all claims or legal proceedings

devinci
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